

CLAIMS:

1. Apparatus for determining the output of a contract or agreement at any point in time as required, comprising means for creating a state machine representative of said contract or agreement at least some of the clauses and/or conditions of said contract or agreement being represented as a respective state variable of said state machine, means for storing said state machine, means for receiving data representative of one or more events relevant to the contract or agreement, determining whether said event changes the status of said state machine and changing the status of said state machine if required.
2. Apparatus according to claim 1, comprising means for storing a plurality of state machines, each representative of a respective contract or agreement, the output of each said contract or agreement being determinable concurrently as required.
3. Apparatus according to claim 1, wherein the computer language used to realise the apparatus is an object-orientated computer language, such that the output of a contract state machine object are assertions that the object makes to other objects or systems.
4. Apparatus according to claim 1, including software components or systems which receive the output assertions of the virtual contract, and determine and implement the "wishes" or "intentions" of the contracts, as required.
5. Apparatus according to claim 1, comprising a kernel including means for storing a plurality of contract or agreements in the form of state machines, means for receiving information regarding events relevant to one or more of the contracts or agreements, and means for changing the state of one or more of the state machines as required according to said event.

6. Apparatus according to claim 5, comprising an event queue which accommodates “external” and “internal” events.
7. Apparatus according to claim 1, wherein if the state of a contract or agreement is not changed for a predetermined period of time, the contract is persisted to storage means to await the occurrence of one or more events which effect its behaviour or output.
8. Apparatus according to claim 1, wherein upon initialisation, virtual contracts are registered with a virtual contract manager such that they can subscribe to events that affect their behaviour to output at any given time.
9. A method of determining an output of a contract or agreement at any point in time as required, the method comprising the steps of creating a state machine representative of said contract or agreement, at least some of the clauses and/or conditions of said contract or agreement being represented by a respective state variable of said state machine, storing said state machine, receiving data representative of one or more events relevant to said contract or agreement, determining whether said event results in a change of state of said state machine and changing the status of said state machine accordingly, determining the state of said state machine at a point in time as required, and determining the output of said contract or agreement accordingly.
10. Apparatus for storing electronically a plurality of contracts or agreements each having a plurality of possible outputs dependent upon the occurrence (or otherwise) of one or more events, means for receiving the information relating to one or more events relevant to one or more of said contracts or agreements and means for determining the output of one or more of said contracts in response to the occurrence (or otherwise) of said one or more events.